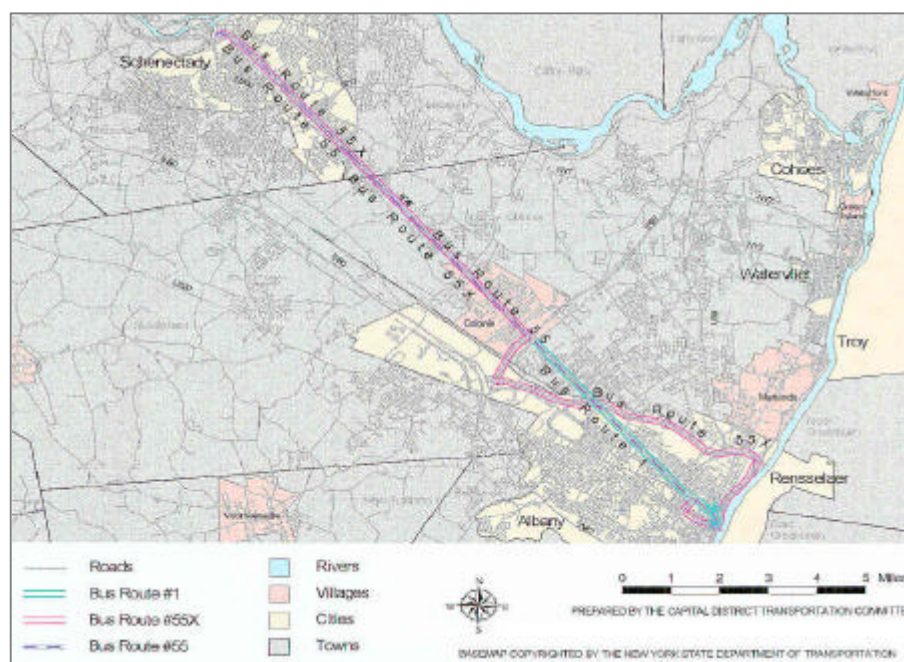


## Federal Transit Administration Bus Rapid Transit Demonstration Program

### *CAPITAL DISTRICT TRANSPORTATION AUTHORITY THE BEST BUS PROGRAM*



#### 1. Project Description

- **Type of Project**

The Best Bus program will operate on New York Route 5 (NY 5) from downtown Albany to downtown Schenectady, a distance of 16 miles. This segment of NY 5 is a typical urban arterial flanked by neighborhood storefront retail land use, and includes 72 signalized intersections. This is a comprehensive program that combines traditional traffic engineering with innovative transit technologies to improve bus transit service on a major corridor for modest capital investment. No exclusive lanes for transit are involved, although passive support for priority (queue jumping) may be included.

The Capital District Transit Authority's flagship bus route serves the project corridor and over 20 percent of the system's passengers. Land use studies under way will recommend

zoning changes and policies that promote growth in transit ridership and pedestrian-friendly development.

- **Method of Operation**

Planned Best Bus BRT features include (a) signal coordination with side street actuation and leading and lagging green bus signal priority, and (b) GPS-based Automated Vehicle Location equipment on buses tied in with door status information and schedule information to optimize bus signal priority. The AVL system will also be tied into both transit operations/dispatch and the TMC (incident detection and congestion probes). In addition, the concept of operations envisions passive priority treatment (potentially including queue jump and bus loading bays) for buses at selected locations.

- **Service Levels**

Operationally, the “Best Bus” Program will encompass:

- improved service levels for the #55, #55X and #1 routes;
- shorter run time -- bring average run time to below 1 hour from current 68 minutes;
- higher frequency service;
- potentially longer span of service;
- coordinated schedules with connecting routes;
- improved schedule adherence;
- coordination with and support for land use intensification efforts;
- consideration of additional feeder routes and route re-structuring;
- shorter dwell times and safer boarding at stops due to low-floor design and new fare collection technology.

- **Estimated Time Savings**

The anticipated overall travel time savings is ten minutes.

- **Number and Type of Vehicles Providing Service**

Service will be provided with 22 NOVA 40 foot low-floor buses.

- **Fare Collection and Boarding**

New on-board fare collection technology capable of accepting “smart cards” will be installed. The development of a Universal Transit Pass for the Capital Region is Phase 2 of the fare collection upgrade. This will further facilitate transfers from other carriers.

- **Use of ITS Capabilities**

Advanced communication systems, including radios, on-board passenger information, and electronic schedule displays at major boarding locations, will be incorporated into the

program. Accurate on-board and on-street passenger information will provide a substantially higher level of service to the rider.

- **Traffic Engineering and Infrastructure**

A major emphasis will be placed on transit priority at signals, and possibly the incorporation of queue jumpers at critical congestion points. Redesign of bus loading bays to facilitate boarding and alighting, and to reduce dwell times is also under consideration.

## **2. Problems Addressed by the Project**

The project implements a regional transportation policy developed by the region's metropolitan planning organization. It is more about exploiting an opportunity than addressing a problem. This corridor carries 20% of CDTA's existing ridership and is being developed in a proactive manner as our "flagship" service to increase patronage.

## **3. Implementation and Operations Schedule**

CDTA is implementing major portions of the "Best Bus" Program now. Milestones and project start dates are listed in Table 1 below. It is fair to say that we are in the early stages of a multi-year schedule of project development, moving from planning to implementation.

**Table 1: List of Milestones**

<b>Project</b>	<b>Milestones</b>	<b>Status/Due Date</b>
Fixed Guideway Study	Final Report	Started 1994 Completed 1996
Route 5 Signal Project	Design Contract Award Draft Design Report Final Design Report/Bid Documents Construction Complete	9/98 9/99 9/2000 9/2001
AVL/Communications System Procurement	Scoping Contract Award System Design/Bid Documents Implementation Complete	9/99 4/00 4/2001
NY5 Land Use Study	Consultant Contract Award Draft Report Final Report	9/98 Completed 4/99 10/99
Central Avenue Strategic Plan	Consultant Contract Award Final Report	8/98 10/99
Colonie Village Pedestrian Improvements	Final Design Report Construction Complete	8/99 1/2000
Automatic Passenger Counters	Contract Began Final Installations	6/98 8/99
Schenectady Intermodal Feasibility Study	Consultant Contract Award Final Report	1/99 7/99

Project	Milestones	Status/Due Date
Schenectady Downtown Master Plan	Consultant Contract Award Final Report	1/99 1/2000
Scheduling Software Procurement	Bid Documents Contract Award Installation Complete	12/99 3/2000 9/2000
Upgraded Fare Collection System	Bid Documents Contract Award Installation Complete	12/99 3/2000 12/2001
Passenger Amenities	Bid Documents Contract Award Installation Complete	12/99 3/2000 10/2001
Central Avenue Reconstruction	Final Design Report Construction Complete	11/2001 5/2003
State Street Streetscape	Final Design Report Construction Complete	12/99 9/2001

#### 4. Funding Plan

The CDTA “Best Bus” Program, Phase 1, is fully funded as shown in Table 2. Please note that all CMAQ or FTA Section 5307 projects include 10% State funding and 10% CDTA local funding as the required match, although not specifically spelled out. The project listing includes total project cost and identified fund sources for planning, design, administration, capital, vehicle and system acquisition. Maintenance will be funded out of CDTA’s and the facility owner’s regular operating budgets and is not specifically listed as a separate item for this corridor. System-wide projects are specifically noted.

**Table 2 : Project Financial Plan**

Project	Status	Cost	Funding Source(s)	Document
Fixed Guideway Study	Complete	\$100,000	STP-Flex	New Visions Regional Transportation Plan
Signal Coordination with Transit Priority at Selected Intersections	Fully funded, in design by Dunn Engineering Associates	\$300,000 PE \$400,000 FD \$3,600,000 C \$200,000 S <b>\$4,500,000 M</b>	CMAQ	CDTC TIP # RG38
Fleet-wide Automatic Vehicle Location System, Including Route 55 “Smart Bus” Components	Fully funded, procurement in FFY 2000	\$3,000,000	CMAQ	CDTC TIP #RG81

<b>Project</b>	<b>Status</b>	<b>Cost</b>	<b>Funding Source(s)</b>	<b>Document</b>
Fleet-wide Communication System Replacement and Upgrade	Fully funded, procurement in 2000	\$3,000,000	Section 5307	CDTC TIP #RG38
Replacement Buses (Low Floor) in 35' and 40' Lengths from ORION Bus Industries, NOVA Bus, and NABI	Fully funded, procurements from 1997-2000	\$50,675,000	S. 5307, S. 5309, STP-Flex, State Dedicated Fund	CDTC TIP #T17
Shuttlefly Feeder Service Start-Up	Implemented	\$300,000	CMAQ	CDTC TIP #T39
Shuttlefly Feeder Service Ongoing Operations	Ongoing	\$750,000/year	State and local sources	CDTA Operations Budget
Land Use Intensification and Market Feasibility Study – Corridor Length	About 65% complete	\$250,000	STP-Flex	CDTC TIP #RG31
Central Avenue Strategic Plan – Central Avenue Business Improvement District	About 55% complete	\$100,000	Albany/ BID funds	City of Albany
Downtown Schenectady Master Plan – Metroplex Authority	About 60% complete	\$200,000	Schenectady/ Metroplex funds	Metroplex
Schenectady Intermodal Facility – Market Feasibility Study	About 90% complete	\$75,000	Local	City Agreement
Core Route Scheduling Study	About 90% complete	\$75,000	Section 5307	CDTC TIP #T62
Information Systems - Fixed Route Scheduling Software	Fully funded – 1999/2000 Procurement	\$300,000	Section 5307	CDTC TIP #T62
Automatic Passenger Counters On 22 Buses	About 85% complete	\$200,000	CMAQ	CDTC TIP #RG38
Replacement/Upgraded Fare Collection Technology	Fully funded, procurement in 2000/2001	\$3,000,000	Section 5307	CDTC TIP #T61
Passenger Boarding/Transfer Facilities on the Corridor and System-wide	Funded, ongoing procurements	\$400,000/year	Private (advertising) / Section 5307	CDTC TIP #T11

Project	Status	Cost	Funding Source(s)	Document
Upgraded Passenger Information Systems	Funded, ongoing procurements	\$250,000/year	Section 5307	CDTC TIP #T64
Transit Passenger Route Guidance System	Funded, 85% complete	\$86,000	NYSERDA	Award letter
Planning, Administration, and Marketing	Funded, ongoing	\$315,000/year	Section 5307	CDTC TIP #T36
State Street Streetscape	In design, construction in 2000	\$2,370,000	STP-Flex, State funding	CDTC TIP #S144 CDTC TIP #S146
State Street Reconstruction from Furman to Fehr	In design, construction in 2000/2001	\$610,000	STP-Flex	CDTC TIP #S121
Village of Colonie – Pedestrian Improvements	In design, construction in 1999/2000	\$270,000	STP-Flex	CDTC TIP #A347
Reconstruction of Central Avenue from City Limits to Manning	Funded, construction in 2001	\$4,400,000	STP-Flex	CDTC TIP #A341

## 5. Issues of Concern re: planning, design, implementation, and/or operations

Primary issues of concern to CDTA are institutional (internal and external), technology availability (vendors), financing, and performance measurement, particularly in cases where non-exclusive lanes are provided.

## 6. Current Status

Subsequent phases of the “Best Bus” Program implementation include the introduction of additional feeder services, additional transit ITS components, and additional passenger amenities.

## **7. Contact**

### Policy Matters

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